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10/664,754	09/18/2003	Yufeng Li	2002P15652US01	4113

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Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER

TERMANINI, SAMIR

ART UNIT PAPER NUMBER

2179

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/664,754

Applicant(s)

LI, YUFENG

Examiner

Samir Termanini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09/18/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

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### PRIORITY

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) is acknowledged. However, applicant has provided inconsistent data with regard to actual filing dates, and further, as to which specific application(s) applicant intends priority under U.S.C. 119(e) to be claimed to.

The Oath/declaration only lists provisional application Serial No. 60/412,917, where the first lines of the specification read:

#### Cross-Reference to Related Applications

- [1] This application claims priority to and incorporates by reference herein in their entirety, pending provisional application Serial No. 60/412,917 (Applicant Docket No. 2002P1 5652US), filed 23 Sep. 2003 [sic], and pending provisional application Serial No. 60/413,010 (Applicant Docket No. 2002P15657US), filed 23 Sep. 2003[sic].

Also, please note that the filing year for both provisional applications listed above are 2002, not 2003 as disclosed above. Even though both references were identified in the specification, and the Office as may have recognized the information concerning the benefit claim shown by its inclusion on the first filing receipt, applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

### ABSTRACT OF THE DISCLOSURE

2. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided

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for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the first few words consist of an implied phrase, "Certain exemplary embodiments provide..." Correction is required. *See* MPEP § 608.01(b).

#### TRADEMARK USAGE

4. The use of the trademark "Pentium III" (line 1, pp. 9) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

DRAWINGS

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show, as described (e.g. in Fig. 1) in the specification, the following elements:

<b>Element(s)</b>	<b>Numeral</b>
HMI	1110
HMI navigation engine	1120
user interface	1130
HMI user screen	1140
HMI screen navigation editor	1150
rendering	1160
information device	1170; 1180
navigation bar	6200
programmable navigation buttons	6220
"Back" button	6222
buttons	6240
Related components buttons	6226 and 6228
process graphic	6100

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet(s) should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the

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filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### DOUBLE PATENTING

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. Effective January 1,

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1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 33, and 34 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 19, and 20, respectively, of copending Application No. 10/666,227. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Although the conflicting claims are not identical, they are not patentably distinct from each other, as compared in the table and discussion below.

Application 10/664,754	Application 10/666,227
<b>Claim 1</b>	<b>Claim 1</b>
1. A method for representing HMI user screens comprising the activities of:	1. A method for configuring HMI user screen navigation comprising the activities of:
obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes;	providing an HMI screen navigation editor to a user; via the HMI screen navigation editor,
determining an arrangement of the collection;	enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;
and rendering the collection according to the arrangement.	and rendering the collection to the user.
<b>Claim 19</b>	<b>Claim 33</b>
19. A machine-readable medium containing instructions for activities comprising:	33. A machine-readable medium containing instructions for activities comprising:
obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes;	providing an HMI screen navigation editor to a user; via the HMI screen navigation editor,
determining an arrangement of the collection;	enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;
and rendering the collection according to the arrangement.	and rendering the collection to the user.
<b>Claim 20</b>	<b>Claim 34</b>
20. A device for providing a representation of user screens for an HMI comprising:	34. A device for providing a representation of user screens for an HMI comprising:
means for obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes;	an HMI screen navigation editor operatively adapted to:
means for determining an arrangement of the collection;	enable a user to create a collection comprising a linked hierarchically organized plurality of

	HMI screen nodes;
and means for rendering the collection according to the arrangement.	and render the collection to the user.

In the comparison table above, claim 1 of the instant application is not patentably distinct from claim 1 of US 10/666,227 because claim 1 of the instant application is broader than claim 1 of US 10/666,227. For example, claim 1 of the instant application is not limited as to how “obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes” is accomplished and covers “providing an HMI screen navigation editor to a user” is recited in Claim 1 of US 10/666,227. The limitation, “providing an HMI editor” is a specific embodiment of “obtain[ing] an organization and a hierarchy of a collection,” as recited in US 10/666,227. A person of ordinary skill in the art would conclude, at the time the invention was made, that it would be obvious to provide an “HMI editor” to “obtain [an] organization” because (para. [0006] and [0007] of) both applications expressly teach “obtaining an organization and a hierarchy of a collection” (*see* para. [0039] of both applications) through use of a HMI user screen navigation editor. Additionally, both references teach the user interface (HMI user screen navigation editor) to be capable of “requesting information from the user” (para. [0053]).

As to independent claims 19 (of the instant application) and 33 (of US 10/666,227), the only difference between these claims and the claim 1 (of both applications) are that identical methods are claimed on a machine-readable medium containing instructions for causing a computer to carry out said methods. Therefore, independent claims 19 and 33 are analyzed as previously discussed with respect to independent claim 1 (of both applications) above.



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As to independent claims 20 (of the instant application) and 34 (of US 10/666,227), the only difference between these claims is that claim 20 (of the instant application) is broader. More specifically, claim 20 of the instant application recites "means for" limitations for accomplishing each limitation in claim 34 of US 10/666,227. By way of example, the specification (at Para. 57) in both applications teach a HMI screen navigation editor as a means obtaining an organization and a hierarchy of a collection. A person of ordinary skill in the art would conclude, at the time the invention was made, that it would have been obvious to provide an HMI screen navigation editor as a means obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes because of the explicit recitations in the specifications. By way of further example, the specification (at Para. 60) in both applications teach a predetermined linked hierarchically organized plurality of HMI screen nodes as a means for determining an arrangement of the collection and "the arrangement...can be created, revised, and/or deleted by a user." A person of ordinary skill in the art would conclude, at the time the invention was made, that it would have been obvious to determine an arrangement of the collection by enabling a user to create a collection because of the explicit recitations in the specifications.

CLAIM REJECTIONS - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-18 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

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Claim 1 is not limited to using a machine to carry out the method since it does not explicitly set forth how or what "determining an arrangement" is nor how it is to be preformed. Accordingly, "If the broadest reasonable interpretation of the claimed invention as a whole encompasses a human being, then a rejection under 35 U.S.C. 101 must be made indicating that the claimed invention is directed to nonstatutory subject matter." See MPEP §2105. The limitation of claim 1, "...determining an arrangement of the collection..." is directed toward non-statutory matter is because the step of "determining" can be carried out by a human being. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it encompasses a human being.

Dependent claims 2-18 are also directed to non-statutory subject matter because they fail to further limit "determining" and accordingly, are not limited to a process, machine, manufacture, or a composition of matter.

#### CLAIM REJECTIONS - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 8, 10-12, and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by *Coburn et al.* (US 2002/0120921 A1).

As to independent claim 1, *Coburn et al.* teach a method for representing HMI user screens comprising the activities of: obtaining an organization and a hierarchy of a collection (via the HMI screen navigation editor 9804, para. [0397] and “hierarchical list of the control assembly types 810, control assembly instances 820, and control assembly instance requests 830”, para. [0758]) comprising a plurality of HMI screen nodes (“a plurality of different CAS will be provided,” para. [0065]); determining an arrangement of the collection (where in FIG. 16, determining the hierarchical relationship between the machine 1610 and the indexer 1620 is illustrated at the top portion of the machine tree 1611; See also para. [0808]); and rendering the collection according to the arrangement (e.g. Fig. 14, 15, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69 etc.).

As to independent claim 19 (computer readable medium), the only difference between claim 19 and claim 1 is that claim 1 is a method claim and claim 19 is an apparatus claim. Thus, claim 19 is analyzed as previously discussed with respect to claim 1 above and is rejected for the reasons set forth above.

As to independent claim 20, *Coburn et al.* teach a device (Fig-1A shows a personal computer system in accordance with the preferred embodiment) for providing a representation of user screens for an HMI comprising: means for obtaining an organization and a hierarchy of a collection of a collection (via the HMI screen navigation editor 9804, para. [0397] and “hierarchical list of the control assembly types 810, control assembly instances 820, and control assembly instance requests 830”, para. [0758]) comprising a plurality of HMI screen nodes (“a plurality

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of different CAS will be provided,” para. [0065]); means for determining an arrangement of the collection (where in FIG. 16, determining the hierarchical relationship between the machine 1610 and the indexer 1620 is illustrated at the top portion of the machine tree 1611; See also para. [0808]); and means for rendering the collection according to the arrangement (e.g. Fig. 14, 15, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69 etc.).

As to dependent claim 8, *Coburn et al.* teach the limitations as previously discussed with respect to claim 1 above, further comprising recursively calculating a position of each of the plurality of HMI screen nodes, (“Upon compilation, optimization can ripple recursively through a program, potentially causing entire rungs, including coils, to be discarded.” para. [0850]).

As to dependent claims 10 and 11, *Coburn et al.* teach the limitations as previously discussed with respect to claim 1 above, further comprising both: “changing the visibility of a node” and “changing the visibility of a node and children of the node.” (“HMI Tool: Allows the user to combine the viewable entities in the control assemblies to layouts to monitor and control the process.” See para. [1289]).

As to dependent claim 12, *Coburn et al.* teach the limitations as previously discussed with respect to claim 1 above, further comprising the arrangement as a tree arrangement (FIG. 18 illustrates a machine tree in accordance with a preferred embodiment).

CLAIM REJECTIONS - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 2-7, 9, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Coburn et al.* (US 2002/0120921 A1) in view of *Arora et al.* (US 5,911,145 A).

As to dependent claim 2, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that the calculation of a position of a leaf is not taught. *Arora et al.* teach the calculation of a position of a leaf (automatic creation within the position of the site hierarchy, col. 2, lines 50-58). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the method of calculating a position of a leaf as taught by *Arora et al.* into the HMI system of *Coburn et al.* By using the method taught by *Arora et al.* one “overcomes the problems and disadvantages of the prior art by using a ‘top-down’ approach to designing [HMI’s]” (col. 2, lines 15-20).

As to dependent claim 3, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that the calculation of a position of a visible leaf is not taught. *Arora et al.* teach the calculation of a position of a visible leaf. “new position in the site hierarchy...displayed [of] siblings, and or children” col. 8, lines 59-64). Thus, the

combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 4, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that calculating a position of a parent is not taught. *Arora et al.* teach the calculation of a parent's position. ("...added in accordance with the position of the new page in the site hierarchy; and automatically creating in the memory a layout data structure," emphasis added, *see* col. 2, lines 45-58). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 5, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that the detecting of a collision is not expressly taught. *Arora et al.* teach the detection of a collision (detecting the user dropping an icon on top of another icon thereby causing node collisions, Col. 6, lines. 58-65; also note: "Page objects and page icons are also called 'nodes.'" Col. 6, line 58-65). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 6, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that updating a position of a parent is not expressly taught. *Arora et al.* teach updating a position of a parent ("The draw objects of the new parents...are... changed so that a link to the moved page will be created," Col. 8, line

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65 to col9. line 18). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 7, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that the detecting of a updating a position of a parent upon detecting a collision is not expressly taught. *Arora et al.* teach the detection of a collision (detecting the user dropping an icon on top of another icon thereby causing node collisions and, as a result, updating a page icon, which could have been a parent, Col. 6, lines. 58-65). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 9, *Coburn et al.* teach the limitations as previously discussed with respect to claim 1 above, further comprising recursively calculating a position of each of the plurality of HMI screen nodes, ("Upon compilation, optimization can ripple recursively through a program, potentially causing entire rungs, including coils, to be discarded." para. [0850]). *Coburn et al.* differs from the claimed invention in that calculating occurs upon detection of a collision.

*Arora et al.* teach calculating positions upon detection of a collision (detecting the user dropping an icon on top of another icon thereby causing node collisions and, as a result, updating a page icon, which could have been a parent, Col. 6, lines. 58-65). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 13, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the

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claimed invention in that the arrangement as a vertical tree is not taught. *Arora et al.* teach the vertical tree arrangement (FIG. 21 shows an “example of a vertical display of pages of a site”). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 14, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that the arrangement as a horizontal tree is not taught. *Arora et al.* teach the horizontal tree arrangement (FIG. 21 “shows an example of a horizontal display of pages of a site”). Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 15, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that an arrangement rendered with equal inter-generational node spacing is not expressly taught. *Arora et al.* teach, in figure 15, an arrangement rendered with equal inter-generational node spacing. Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 16, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that an arrangement rendered with equal intra-generational node spacing is not expressly taught. *Arora et al.* teach, in figure 20, an arrangement rendered with equal intra-generational node spacing. Thus, the



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combination of *Coburn et al.* and *Arora et al.* would meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above. Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 17, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that an arrangement where a parent is aligned centrally to all children of that parent is not expressly taught. *Arora et al.* teach, in figure 20, an arrangement where a parent is aligned centrally to all children of that parent. Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

As to dependent claim 18, *Coburn et al.* teach the same limitations as previously discussed with respect to claim 1 above. *Coburn et al.* differs from the claimed invention in that an arrangement rendered with all nuclear children separated equally is not expressly taught. *Arora et al.* teach, in figure 20, an arrangement rendered with all nuclear children separated equally. Thus, the combination of *Coburn et al.* and *Arora et al.* meet the claimed limitations for the same reasons set forth in the discussion of claim 2 above.

#### CONCLUSION

14. The prior art made of record and not relied upon considered pertinent to applicant's disclosure is now recited:

- [1] (EP 0 727 740 A2) for teaching a HMI editor;
- [2] (US 5,812,135 A) for teaching partially displayed hierarchy nodes; and

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[3] (US 6055369 A) for teaching a visual programming with flow apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The examiner can normally be reached 9:00AM - 4:00PM Monday – Friday (9:00AM - 3:00PM on alternating Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ST/  
July 20, 2006

Samir Termanini  
Patent Examiner



SHUWANG LIU  
SUPERVISORY PATENT EXAMINER